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| 09/726,451 | 12/01/2000 | Yoshimi Hirahara | 32014-167949 | 2010 |
| 26694 | 7590 | 06/09/2004 | EXAMINER | |
| VENABLE, BAETJER, HOWARD AND CIVILETTI, LLP | | | FOX, JAMAL A | |
| P.O. BOX 34385 | | | ART UNIT | |
| WASHINGTON, DC 20043-9998 | | | PAPER NUMBER | |

2664

DATE MAILED: 06/09/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/726,451

Applicant(s)

HIRAHARA, YOSHIMI

Examiner

Jamal A Fox

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-8, 13 and 14 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 9-11 is/are rejected.
- 7) ☒ Claim(s) 4, 5 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☒ Certified copies of the priority documents have been received in Application No. 09/726,451.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. New corrected drawings are required in this application because Figures 1-8 of the drawings have text that is illegible. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: On page 2 line 24, after "the", "channel" is spelled incorrectly.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeburg et al. (U.S. Patent No. 5,940,381).

Referring to claim 1, Freeburg et al. discloses a radio communication system (Figures 1-6 and respective portions of the spec.) performing a soft hand-off (handoff,

col. 4 lines 48-58 and col. 6 lines 28-60) procedure for a mobile station, the radio communication system comprising:

a base station controller (Figures 1-6, ref. signs 11 and 12 and respective portions of the spec.) for determining a commencement and a termination of the soft hand-off procedure,

a first base station (Figures 1-6, ref. sign 13 and respective portions of the spec.) for performing asynchronous communication with the base station controller via a first communication line (Figures 1-6, ref. signs 41, 50, 60 and 61 and respective portions of the spec.), and

a second base station (Figures 1-6, ref. sign 14 and respective portions of the spec.) for performing asynchronous communication (ATM, col. 4 lines 3-58) with the base station controller via a second communication line (Figures 1-6, ref. signs 42, 51, 62 and 63 and respective portions of the spec.), but does not explicitly teach of assigning a first hand-off exclusive bandwidth to the first communication line bases on the commencement of the soft hand-off procedure and for assigning a second hand-off exclusive bandwidth, that is approximately equal to the first hand-off exclusive bandwidth, to the second communication line bases on the commencement of the soft hand-off procedure. However, approximately equal bandwidths on different channels are disclosed in (col. 12 lines 49-64). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have included assigning a first hand-off exclusive bandwidth to the first communication line bases on the commencement of the soft hand-off procedure and for assigning a second hand-off

exclusive bandwidth, that is approximately equal to the first hand-off exclusive bandwidth, to the second communication line bases on the commencement of the soft hand-off procedure in order to ensure site diversity as suggested by Freeburg et al.

Referring to claim 2, Freeburg et al. discloses a radio communication system according to claim 1, wherein the asynchronous communication is asynchronous transfer mode (ATM) communication (ATM, col. 4 lines 3-58).

Referring to claim 9, Freeburg et al. discloses a soft hand-off method in a radio communication system comprising a base station controller (Figures 1-6, ref. signs 11 and 12 and respective portions of the spec.) which communicates with each of a first base station (Figures 1-6, ref. sign 13 and respective portions of the spec.) and a second base station (Figures 1-6, ref. sign 14 and respective portions of the spec.) by performing asynchronous communication (ATM, col. 4 lines 3-58), the method comprising the steps of;

assigning a normal communication bandwidth to a first communication line between the base station controller and the first base station for normal communication between the base station controller and the mobile station (col. 12 lines 49-64),

determining a commencement of the soft hand-off procedure between the first base station and the second base station, assigning a first hand-off exclusive bandwidth to the first communication line (col. 13 lines 15-46),

simultaneously transmitting packet signals from the base station controller to each of the first and second base stations via the first and second communication lines respectively (col. 5 lines 24-43), but does not explicitly teach of assigning a second

hand-off exclusive bandwidth, which is approximately equal to the first hand-off exclusive bandwidth, to a second communication line between the base station controller and the second base station. However, approximately equal bandwidths on different channels are disclosed in (col. 12 lines 49-64). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have included assigning a second hand-off exclusive bandwidth, which is approximately equal to the first hand-off exclusive bandwidth, to a second communication line between the base station controller and the second base station in order to ensure site diversity as suggested by Freeburg et al.

Referring to claim 11, Freeburg et al. discloses a soft hand-off method according to claim 9, wherein the asynchronous communication is asynchronous transfer mode (ATM) communication (ATM, col. 4 lines 3-58).

Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeburg et al. in view of Proctor et al.

Referring to claim 3, Freeburg et al. discloses a radio communication system according to claim 1, wherein the first and second hand-off exclusive bandwidths are the same (col. 12 lines 49-64), but does not explicitly teach of the bandwidths being a fixed value. However, Proctor et al. discloses fixed bandwidths in (col. 1 lines 25-33). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have included the first and second hand-off exclusive bandwidths that are the same and a fixed value of Proctor et al. to the invention of

Freeburg et al. in order to dedicate each channel to one phone call as suggested by Proctor et al.

Referring to claim 10, Freeburg et al. discloses a soft hand-off method according to claim 9, wherein the first and second hand-off exclusive bandwidths are the same (col. 12 lines 49-64), but does not explicitly teach of the bandwidths being a fixed value. However, Proctor et al. discloses fixed bandwidths in (col. 1 lines 25-33). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have included the first and second hand-off exclusive bandwidths that are the same and a fixed value of Proctor et al. to the invention of Freeburg et al. in order to dedicate each channel to one phone call as suggested by Proctor et al.

5. Claims 6-8, 13 and 14 are allowed.

6. Claims 4, 5 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 305-3988, (for formal communications intended for entry)

Or:

(703) 305-3988 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121
Crystal Drive, Arlington, VA. 22202, Sixth Floor (Receptionist).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamal A. Fox whose telephone number is (703) 305-5741. The examiner can normally be reached on Monday-Friday 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (703) 305-4366. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9315 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

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J. A. F.
Jamal A. Fox

A handwritten signature in black ink, appearing to read 'W. Chin', with a stylized, sweeping flourish extending to the right.

WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600